

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

Title V draft permit No. V-98-000
Van Leer Containers, Inc.
Florence, Kentucky

REVIEWER: Sajjad Quabili
Plant I.D. # 079-0280-0010
Application Log # F459

SOURCE DESCRIPTION:

Van Leer Containers operates a container manufacturing facility at Florence. The plant operates spray painting booths and paint drying ovens in the container manufacturing line. The company manufactures 55 gallon steel drums as per design and color specified by the customers. The drums are assembled and coated with lining materials and paints. Drum tops and bottoms are also coated with lining materials and paints in a separate manufacturing line. The painting process known as wet on wet is employed to avoid curing of the paint before another coat of paint can be applied. Each paint booth is accompanied by a drying oven.

The plant is located in Boone County which is designated as non-attainment for ozone per 401 KAR 51:010, Attainment status designations. The plant is exempted from VOC controls under 401 KAR 61:132 Section 6(1)(a) and Section 6(1)(b) because the coating for lining will have VOC content less than 4.3 lb/gal and coating delivered to applicators associated with air or forced air dried items or items subject to outdoor or harsh exposure or exterior environmental conditions on exterior of drum will have a VOC content less than 3.5 lb/gal. The division is reserving the right to conduct tests per methods incorporated by reference in 401 KAR 50:015 to verify that coatings meet exemption requirements. 401 KAR 61:020, Existing process operations applies to particulate matter emission from the painting operations.

COMMENTS:

The VOC emissions from the paint application are based on the VOC content of the paint. Part of the VOCs from paint sprayed in the booths will be flashed off at the spray booth and the remainder will be released through curing ovens. For simplicity of the calculation emission through paint booths was assumed to be 100%. No control equipment is employed for the drying oven.

Per 401 KAR 61:020, Section 3, for each existing spray booth and oven particulate emission will not be allowed to exceed 2.58 lb/hr. Particulate emission is controlled by employing exhaust filters for each spray booth. Actual PM emission will be far less than allowable limit. The transfer efficiency for the interior surface of the drums was assumed 90% and for the exterior surface was assumed 80%. Particulate emissions from each spray booth is controlled by the filters which have estimated efficiency of 98%. Particulate emission through the drying oven is insignificant. Natural gas is used as fuel for the drying oven which emits a negligible amount of particulate emission. No control equipment is used for the ovens. Another indicator of PM control is opacity, which will not be allowed to equal or exceed 40%.

Pursuant to Regulation 401 KAR 61:132, Section 6, the division is requiring daily record keeping of lining and exterior coating material usage at the source and summaries of those records at the end of each month. This data is required to calculate actual emissions of VOC and HAPs at the source.

The miscellaneous metal parts and products surface coating MACT standard is due by November 15, 2000. Van Leer will be subject to the MACT Rule and will be required to assure the Division that the sources is in compliance.

EMISSION AND OPERATING CAPS DESCRIPTION:

Van Leer has requested to become a conditional major source with emissions limited to less than 100 tons per year VOCs. Van Leer is a major Title V source for glycol ethers (each over 10 tons/year) listed in 401 KAR 63:060, List of hazardous air pollutants, petitions process, lesser quantity designations, and source category list. The company is also potentially major Title V source of over 25 tons/year of the sum of all of HAPs. The division has agreed with the facility to put a cap less than 100 tons per year VOCs emission to preclude a new source review. The source will comply with the permit limit by using lower VOC content paints and coatings, as allowed, for the drum manufacturing operations.

Currently, Van Leer is permitted to operate their plant under two air quality permits (0-91-005 and C-93-140). The modification to the plant(C-93-140) applied for in 1993 would have resulted in VOC emissions in excess of 100 tons per year in an ozone nonattainment area. However, the company revised their plans and elected to install the new line of operation with emissions less than 100 tons per year and leave the existing line in place to preclude the application of Kentucky Regulation KAR 51:052, Review of new sources in or impacting upon nonattainment areas.

PERIODIC MONITORING:

Compliance with annual emissions cap will be ensured by the monitoring, record keeping and reporting specified in the permit.

Since the VOCs emissions are limited to less than 100 tpy for the Van Leer plant in an ozone non-attainment area, the division is requiring the plant to keep daily records of usage and VOC and HAP contents of painting, lining materials and solvents at the source and to summarize those records at the end of each month. The permittee shall also keep records of the monthly and twelve months rolling total for VOCs and HAPs emissions at the source each month. The keeping of daily records for particulate matter is not required as PM emissions are far less than the allowable limit of 2.58 lb / hr for each affected facility.

Van Leer is required to report to the regional office monthly the VOCs and HAPs usage and emissions at the source because the source is located in a nonattainment area for ozone. Violation of the permit limits for VOC emissions may require new source review.

OPERATIONAL FLEXIBILITY:

Operational flexibility is allowed under the permit by not placing throughput or emissions limits on individual machines, but by placing all machines under a sourcewide emissions cap(See Periodic Monitoring above).

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.